

### REMARKS

Added Claims 22 and 23 are directed to the product produced by the inventive process.

Applicants acknowledge their obligation under 37 CFR 1.56 as set forth in paragraph 2 of the Action.

The invention is directed to a process for improving the impact performance of a thermoplastic molding composition. The process entails mixing polycarbonate with nanoclay and carboxylic acid in specified relative amounts. The improvement is gauged in relation to a corresponding composition that contains no carboxylic acid.

Claims 13-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,610,770 (Ross) in view of U.S. Patent 5,804,613 (Beall).

Ross disclosed a fire retardant polymer composition comprising clay modified with quaternary ammonium compound and organic material capable of intercalating the clay. The organic material may be acid, including citric acid, and the polymer can be polycarbonate. Beall disclosed intercalates of clay and composite material that include polycarbonate and such intercalates.

Nothing in the cited art disclose impact strength of the disclosed compositions, much less improved impact strength attributed to the mixing of carboxylic acid therewith. Moreover, Ross that disclosed polycarbonate and SAN (column 5 lines 27 and 29) among the synthetic polymers suitable in its invention fails to recognize the difference between these resins at the point of invention.

Enclosed is a Declaration by Inventor Dr. Chung that points to the surprising and unexpected difference between the claimed invention and the cited art. Experimental results enable comparison between polycarbonate thermoplastic molding compositions and corresponding compositions wherein polymer is SAN. The results clearly show that the incorporation of carboxylic acid in a polycarbonate

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composition that contains the claimed clay results in improved impact performance. The results further show that a corresponding composition where SAN is the matrix does not thus show improved performance.


In view of the showing it is respectfully submitted that the rejection under Section 103 is untenable and its reconsideration and withdrawal are solicited.

Added Claims 22 and 23 are directed to the products prepared by the inventive process are believed to likewise be patentable over the cited art.

Believing the above represents a complete response to the Office Action and that the application is in condition for allowance, Applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By

  
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